Mississippi Emergency Medical Technician—Paramedic Refresher Block Curriculum

Course Overview

Course Design

The purpose of the refresher course (including a final written examination and practical skills test) is to insure that all EMT-Paramedics maintain a high level of professional skill. A refresher course of 48 hours (minimum) must be taken every two (2) years after completing initial training. It will have a dual function of serving as a review and providing an opportunity for EMT-Paramedic to receive instruction in the latest approved techniques. This course will cover DOT National Standard objectives and must be state approved.

This EMT-Paramedic Refresher curriculum is the minimal acceptable content that must be included in any EMT-Paramedic Refresher educational program. The refresher program has been divided into six (6) eight hour "Blocks" which may be offered independent of each other. The "Block" format follows the ideation that it may be difficult for the participant to be away from work for six consecutive days and enables the participant to take any "Block" at any approved program when it is convenient for the participant; thus standardizing the EMT-Paramedic Refresher regardless of where in the state it is completed.

For a participant to successfully complete the "Block" he or she must demonstrate proficiency over the knowledge and skills outlined in this refresher curriculum. This proficiency will be demonstrated by scoring a minimum of 75% on the written post-test and satisfactory completion of skills sheet with no critical failures and a minimum of 75% on all skills.

Since there is a Skills proficiency requirement with all "Blocks" there is a maximum Instructor to Participant ratio of 1:8 during all skills review, practice, and testing. The recommended Lecture Instructor to Participant ratio is 1:24. This ratio is necessary for maximum participant educational benefit.

If the participant is unsuccessful at either the written or practical portions of their "Block" the hosting institution may offer same day re-testing or may require the unsuccessful participant to return at a later time to re-test. The unsuccessful participant will have three (3) attempts within 30 days from the first attempt to successfully complete the "Block." Each institution may, at their discretion, offer re-testing for a participant who attempted a "Block" at another institution, within the last 30 days. Each unsuccessful participant will receive the verification letter attached in Appendix D and must provide it upon re-testing. If the participant does not have the verification letter he or she will not be allowed to re-test until verification is obtained.

Pretest

The use of a psychomotor pretest is the best measurement of an individual's performance. The pretest identifies skills that need to be emphasized during the course. Likewise, if all

candidates possess competency in a skill prior to taking the program, it may not be necessary to cover that skill.

Skill Labs
When the sponsoring agency does not administer a pretest, the staff can use the skill labs to measure the competency of each participant. The skill labs ensure validation is sprinkled throughout the refresher program.

End of Program
At the end of the refresher program an evaluation process can be utilized if a pretest and skill labs were not used. If an end of program evaluation process is used, some skills may need to be re-evaluated if participants are unsuccessful.

Participants must have documentation of demonstrating competence for each skill identified during the program regardless of what process is used.

The refresher curriculum is the minimum acceptable content to be covered by education programs. With certifying agency approval, the student may meet some program objectives by satisfactorily completing a nationally recognized trauma life support program, cardiac care program, or pediatric care program. Although some certifying agencies allow providers to attend continuing education programs, it is recommended that providers participate in regularly scheduled group education sessions as well.

REMEDIATION

Participants who do not complete the program's objectives or pass the evaluation process should have their performance reviewed by one of the instructional staff members. The participant's strengths and weaknesses should be identified and a plan developed that helps the participant successfully completes the requirements. This plan may include additional classroom time, clinical time, field time, or repeating the entire program.

EMT-Paramedic Refresher recommended hour requirements.

Airway, Breathing, and Cardiology • Provide ventilatory support for a patient • Attempt to resuscitate a patient in cardiac arrest • Provide care to a patient experiencing cardiovascular compromise • Provide post resuscitation care to a cardiac arrest patient	8 hours
Airway, Breathing, and Cardiology • Assess and provide care for respiratory distress in an adult patient • Perform techniques to assure a patent airway • Use oxygen delivery system components • Assess and provide care to a patient experiencing non-traumatic chest pain/discomfort	8 hours
Medical Emergencies • Assess and provide care to a patient experiencing an allergic reaction • Assess a patient with possible overdose • Asses and provide care to a near-drowning patient	3 hours
Medical Emergencies • Assess and provide care to a patient with an altered mental status • Assess and provide care to a patient with a history of diabetes • Assess and provide care to a patient experiencing a seizure • Assess and provide care to a patient exposed to heat or cold • Assess and provide care to a patient experiencing a behavioral problem • Assess and provide care to a patient with a suspected communicable disease	5 hours
Trauma • Perform a rapid trauma assessment • Assess a patient with a head injury • Assess and provide care to a patient with suspected spinal injury • Provide care to a patient with a chest injury • Provide care to a patient with an open abdominal injury • Provide care to a patient with shock/Hypoperfusion	4 hours
Trauma • Provide care of patient with a painful, swollen, deformed extremity • Assess and provide care to a patient with a burn injury	1 hour
Ob/Peds • Assess and provide care to an infant or child with cardiac arrest • Assess and provide care to an infant or child with respiratory distress • Assess and provide care to an infant or child with shock/Hypoperfusion • Assess and provide care to an infant or child with trauma	8 hours

Ob/Peds - Assess and provide care to an infant or child with suspected abuse or neglect - Assess and provide care to an infant or child with a fever - Assess and provide care for the obstetric patient - Provide care to the newborn - Provide care to the mother immediately following delivery of a newborn	7 hours
Current Trends - Use body Mechanics when lifting and moving a patient - Communicate with a patient while providing care	2 hours
Current Trends - Current Trends in Prehospital Care/EMS Update	2 hours
Total Hours	***48 hours***

The following have been identified as essential items in the 2001 EMT-Paramedic Refresher Program:

- Trauma assessment
- Medical assessment
- Ventilation
  - Adult
  - Pediatric
- Cardiac arrest management
  - Adult
  - Pediatric
- Medication administration
  - Intravenous
  - Intraosseous
- Oral scenarios
- Basic skills
  - Seated spinal immobilization
  - Femoral/longbone immobilization
  - Wounds, bleeding, and shock management
- Lifting, moving, and carrying patients

Validation of psychomotor performance must be accomplished prior to issuing a certificate of course completion. Three opportunities are available to the instructional staff to validate a participant's performance.

Refresher Block I:

Airway/Ventilation

Refresher Block I: Airway/Ventilation

PRACTICE ANALYSIS TASK ITEM

- Provide ventilatory support for a patient.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic will be able to:

1. Describe the indications, contraindications, advantages, disadvantages, complications, and technique for ventilating a patient by:
    a. Mouth-to-mouth
    b. Mouth-to-nose
    c. Mouth-to-mask
    d. One person bag-valve-mask
    e. Two person bag-valve-mask
    f. Flow-restricted, oxygen-powered ventilation device
2. Compare the ventilation techniques used for an adult patient to those used for pediatric patients.
3. Describe indications, contraindications, advantages, disadvantages, complications, and technique for ventilating a patient with an automatic transport ventilator (ATV).
4. Define how to ventilate with a patient with a stoma, bag-valve-mask-to-stoma ventilation.
5. Describe the special considerations in airway management and ventilation for patients with facial injuries.
6. Describe the special considerations in airway management and ventilation for the pediatric patient.

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic will be able to:

1. Demonstrate ventilating a patient by the following techniques:
    a. Mouth-to-mask ventilation
    b. One person bag-valve-mask
    c. Two person bag-valve-mask
    d. Flow-restricted, oxygen-powered ventilation device
    e. Automatic transport ventilator
    f. Bag-valve-mask-to-stoma ventilation
2. Ventilate a pediatric patient using the one and two person techniques.
3. Perform bag-valve-mask ventilation with an in-line small-volume nebulizer.
4. Perform assessment to confirm correct placement of the endotracheal tube

5. Intubate the trachea by the following methods:
    a. Orotracheal intubation
    b. Nasotracheal intubation
    c. Multi-lumen airways

6. Perform transtracheal catheter ventilation (needle cricothyrotomy).

Refresher Block II:

Cardiovascular

REFRESHER BLOCK II: CARDIOVASCULAR

PRACTICE ANALYSIS TASK ITEMS

1. Provide care to a patient experiencing cardiovascular compromise.
2. Attempt to resuscitate a patient in cardiac arrest.
3. Provide post-resuscitation care to a cardiac arrest patient.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic will be able to:

1. Identify the major therapeutic objectives in the treatment of patients with any arrhythmia.
2. Identify the major mechanical, pharmacological and electrical therapeutic interventions.
3. Based on field impressions, identify the need for rapid intervention for the patient in cardiovascular compromise.
4. Identify the clinical indications for transcutaneous and permanent artificial cardiac pacing.
5. Describe the components and the functions of a transcutaneous pacing system.
6. Explain what each setting and indicator on a transcutaneous pacing system represents and how the settings may be adjusted.
7. Describe the techniques of applying a transcutaneous pacing system.
8. Specify the measures that may be taken to prevent or minimize complications in the patient suspected of myocardial infarction.
9. Describe the most commonly used cardiac drugs in terms of therapeutic effect and dosages, routes of administration, side effects and toxic effects.
10. List the interventions prescribed for the patient in acute congestive heart failure.
11. Describe the most commonly used pharmacological agents in the management of congestive heart failure in terms of therapeutic effect, dosages, routes of administration, side effects and toxic effects.
12. Identify the paramedic responsibilities associated with management of a patient with cardiac tamponade.
13. From the priority of clinical problems identified, state the management responsibilities for the patient with a hypertensive emergency.
14. Identify the drugs of choice for hypertensive emergencies, rationale for use, clinical precautions and disadvantages of selected antihypertensive agents.
15. Describe the most commonly used pharmacological agents in the management of cardiogenic shock in terms of therapeutic effects, dosages, routes of administration, side effects and toxic effects.
16. Identify the paramedic responsibilities associated with management of a patient in cardiogenic shock.
17. Identify the critical actions necessary in caring for the patient with cardiac arrest.

18. Describe the most commonly used pharmacological agents in the management of cardiac arrest in terms of therapeutic effects.
19. Develop, execute, and evaluate a treatment plan based on field impression for the patient in need of a pacemaker.
20. Develop, execute, and evaluate a treatment plan based on the field impression for the heart failure patient.
21. Develop, execute and evaluate a treatment plan based on the field impression for the patient with cardiac tamponade.
22. Develop, execute and evaluate a treatment plan based on the field impression for the patient with a hypertensive emergency.
23. Develop, execute, and evaluate a treatment plan based on the field impression for the patient with cardiogenic shock.
24. Integrate pathophysiological principles to the assessment and field management of a patient with chest pain.

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic will be able to:

1. Cardiopulmonary resuscitation
2. Defibrillation
3. Synchronized cardioversion
4. Transcutaneous pacing

Refresher Block III:

Medical

REFRESHER BLOCK III: MEDICAL

PRACTICE ANALYSIS TASK ITEMS

1. Assess a patient experiencing an allergic reaction
2. Provide care to the patient experiencing an allergic reaction
3. Assess a near drowning patient
4. Provide care to a near drowning patient
5. Assess a patient with a possible overdose

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic will be able to:

1. Describe physical manifestations in anaphylaxis.
2. Differentiate manifestations of an allergic reaction from anaphylaxis.
3. Recognize the signs and symptoms related to anaphylaxis.
4. Differentiate among the various treatment and pharmacological interventions used in the management of anaphylaxis.
5. Correlate abnormal findings in assessment with the clinical significance in the patient with anaphylaxis.
6. Develop a treatment plan based on field impression in the patient with allergic reaction and anaphylaxis.
7. List signs and symptoms of near-drowning.
8. Describe the lack of significance of fresh versus saltwater immersion, as it relates to near-drowning.
9. Discuss the incidence of "wet" versus "dry" drownings and the differences in their management.
10. Discuss the complications and protective role of hypothermia in the context of near-drowning.
11. Correlate the abnormal findings in assessment with the clinical significance in the patient with near-drowning.
12. Differentiate among the various treatments and interventions in the management of near-drowning.
13. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the near-drowning patient.
14. Differentiate toxic substance emergencies based on assessment findings.
15. Correlate abnormal findings in the assessment with the clinical significance in the patient exposed to a toxic substance.
16. Correlate the abnormal findings in assessment with the clinical significance in patients with the most common poisonings by overdose.
17. Correlate the abnormal findings in assessment with the clinical significance in patients using the most commonly abused drugs.

18. List the clinical uses, street names, pharmacology, assessment finding and management for patient who have taken the following drugs or been exposed to the following substances:
    a. Cocaine
    b. Marijuana and cannabis compounds
    c. Amphetamines and amphetamine-like drugs
    d. Barbiturates
    e. Sedative-hypnotics
    f. Cyanide
    g. Narcotics/ opiates
    h. Cardiac medications
    i. Caustics
    j. Common household substances
    k. Drugs abused for sexual purposes/ sexual gratification
    l. Carbon monoxide
    m. Alcohols
    n. Hydrocarbons
    o. Psychiatric medications
    p. Newer anti-depressants and serotonin syndromes
    q. Lithium
    r. MAO inhibitors
    s. Non-prescription pain medications
    t. Nonsteroidal antiinflammatory agents
    u. Salicylates
    v. Acetaminophen
    w. Metals
    x. Plants and mushrooms

Refresher Block IV

Trauma

REFRESHER BLOCK IV: TRAUMA

PRACTICE ANALYSIS TASK ITEMS

1. Perform a rapid trauma assessment
2. Provide care to a patient with shock (hypoperfusion)
3. Assess a patient with a head injury
4. Assess a patient with a suspected spinal injury
5. Provide care to a patient with a suspected spinal injury
6. Provide care to a patient with a chest injury
7. Provide care to a patient with a open abdominal injury

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic will be able to:

1. State the reasons for performing a rapid trauma assessment.
2. Recite examples and explain why patients should receive a rapid trauma assessment.
3. Apply the techniques of physical examination to the trauma patient.
4. Describe the areas included in the rapid trauma assessment and discuss what should be evaluated.
5. Differentiate cases when the rapid assessment may be altered in order to provide patient care.
6. Discuss the treatment plan and management of hemorrhage and shock.
7. Develop, execute and evaluate a treatment plan based on the field impression for the hemorrhage or shock patient.
8. Relate assessment findings associated with head/ brain injuries to the pathophysiologic process.
9. Classify head injuries (mild, moderate, severe) according to assessment findings.
10. Relate assessment findings associated with concussion, moderate and severe diffuse axonal injury to pathophysiology.
11. Relate assessment findings associated with skull fracture to pathophysiology.
12. Relate assessment findings associated with cerebral contusion to pathophysiology.
13. Relate assessment findings associated with intracranial hemorrhage to pathophysiology, including:
    a. Epidural
    b. Subdural
    c. Intracerebral
    d. Subarachnoid
14. Integrate the pathophysiological principles to the assessment of a patient with head/ brain injury.
15. Differentiate between the types of head/ brain injuries based on the assessment and history.

16. Formulate a field impression for a patient with a head/ brain injury based on the assessment findings.
17. Describe the assessment findings associated with spinal injuries.
18. Identify the need for rapid intervention and transport of the patient with spinal injuries.
19. Integrate the pathophysiological principles to the assessment of a patient with a spinal injury.
20. Differentiate between spinal injuries based on the assessment and history.
21. Formulate a field impression based on the assessment findings (spinal injuries).
22. Develop a patient management plan based on the field impression (spinal injuries).
23. Describe the assessment findings associated with traumatic spinal injuries.
24. Describe the management of traumatic spinal injuries.
25. Integrate pathophysiological principles to the assessment of a patient with a traumatic spinal injury.
26. Differentiate between traumatic and non-traumatic spinal injuries based on the assessment and history.
27. Formulate a field impression for traumatic spinal injury based on the assessment findings.
28. Develop a patient management plan for traumatic spinal injury based on the field impression.
29. Describe the assessment findings associated with non-traumatic spinal injuries.
30. Describe the management of non-traumatic spinal injuries.
31. Integrate pathophysiological principles to the assessment of a patient with non-traumatic spinal injury.
32. Differentiate between traumatic and non-traumatic spinal injuries based on the assessment and history.
33. Formulate a field impression for non-traumatic spinal injury based on the assessment findings.
34. Develop a patient management plan for non-traumatic spinal injury based on the field impression.
35. Discuss the management of thoracic injuries.
36. Identify the need for rapid intervention and transport of the patient with chest wall injuries.
37. Discuss the management of chest wall injuries.
38. Discuss the management of lung injuries.
39. Identify the need for rapid intervention and transport of the patient with lung injuries.
40. Discuss the management of myocardial injuries.
41. Identify the need for rapid intervention and transport of the patient with myocardial injuries.
42. Discuss the management of vascular injuries.
43. Identify the need for rapid intervention and transport of the patient with vascular injuries.
44. Discuss the management of diaphragmatic injuries.

45. Identify the need for rapid intervention and transport of the patient with diaphragmatic injuries.
46. Discuss the management of esophageal injuries.
47. Identify the need for rapid intervention and transport of the patient with esophageal injuries.
48. Discuss the management of tracheo-bronchial injuries.
49. Identify the need for rapid intervention and transport of the patient with tracheo-bronchial injuries.
50. Discuss the management of traumatic asphyxia.
51. Identify the need for rapid intervention and transport of the patient with traumatic asphyxia.
52. Develop a patient management plan based on the field impression (thoracic injuries).
53. Describe the management of abdominal injuries.
54. Develop a patient management plan for patients with abdominal trauma based on the field impression.
55. Formulate a field impression based upon the assessment findings for a patient with abdominal injuries.
56. Develop a patient management plan for a patient with abdominal injuries, based upon field impression.

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic will be able to:

1. Using the techniques of physical examination, demonstrate the assessment of a trauma patient.
2. Demonstrate the rapid trauma assessment used to assess a patient based on mechanism of injury.
3. Demonstrate the management of a patient with signs and symptoms of hemorrhagic shock..
4. Demonstrate the management of a patient with signs and symptoms of compensated hemorrhagic shock.
5. Demonstrate the management of a patient with signs and symptoms of decompensated hemorrhagic shock.
6. Demonstrate a clinical assessment to determine the proper management modality for a patient with a suspected traumatic spinal injury.
7. Demonstrate a clinical assessment to determine the proper management modality for a patient with a suspected non-traumatic spinal injury.
8. Demonstrate immobilization of the urgent and non-urgent patient with assessment findings of spinal injury from the following presentations:
    a. Supine
    b. Prone
    c. Semi-prone
    d. Sitting

    e. Standing
9. Demonstrate preferred methods for stabilization of a helmet from a potentially spine injured patient.
10. Demonstrate the following techniques of management for thoracic injuries:
    a. Needle decompression
    b. Fracture stabilization
    c. Elective intubation
    d. ECG monitoring
    e. Oxygenation and ventilation
11. Demonstrate a clinical assessment to determine the proper treatment plan for a patient with suspected abdominal trauma.

Refresher Block V

Pediatrics

REFRESHER BLOCK V: PEDIATRICS

PRACTICE ANALYSIS TASK ITEMS

1. Assess an infant or child w/ cardiac arrest
2. Provide care to an infant or child w/ cardiac arrest
3. Assess an infant or child w/ respiratory distress
4. Provide care to an infant or child in respiratory distress
5. Assess an infant or child with shock (hypoperfusion)
6. Provide care to an infant or child with shock (hypoperfusion)
7. Assess an infant or child with trauma
8. Provide care to an infant or child with trauma

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic will be able to:

1. Describe techniques for successful assessment of infants and children.
2. Describe techniques for successful treatment of infants and children.
3. Discuss the appropriate equipment utilized to obtain pediatric vital signs.
4. Determine appropriate airway adjuncts for infants and children.
5. Discuss complications of improper utilization of airway adjuncts with infants and children.
6. Discuss appropriate ventilation devices for infants and children.
7. Discuss complications of improper utilization of ventilation devices with infants & children.
8. Discuss appropriate endotracheal intubation equipment for infants and children.
9. Identify complications of improper endotracheal intubation procedure in infants and children.
10. List the indications and methods for gastric decompression for infants and children.
11. Differentiate between upper airway obstruction and lower airway disease.
12. Describe the general approach to the treatment of children with respiratory distress, failure, or arrest from upper airway obstruction or lower airway disease.
13. Discuss the common causes of hypoperfusion in infants and children.
14. Evaluate the severity of hypoperfusion in infants and children.
15. Identify the major classifications of pediatric cardiac rhythms.
16. Discuss the primary etiologies of cardiopulmonary arrest in infants and children.
17. Discuss age appropriate vascular access sites for infants and children.
18. Discuss the appropriate equipment for vascular access in infants and children.
19. Identify complications of vascular access for infants and children.
20. Describe the primary etiologies of altered level of consciousness in infants and children.
21. Identify common lethal mechanisms of injury in infants and children.

22. Discuss anatomical features of children that predispose or protect them from certain injuries.
23. Describe aspects of infant and children airway management that are affected by potential cervical spine injury.
24. Identify infant and child trauma patients who require spinal immobilization.
25. Discuss fluid management and shock treatment for infant and child trauma patient.
26. Discuss the parent/ caregiver responses to the death of an infant or child.
27. Discuss basic cardiac life support (CPR) guidelines for infants and children.
28. Identify appropriate parameters for performing infant and child CPR.
29. Integrate advanced life support skills with basic cardiac life support for infants and children.
30. Discuss the indications, dosage, route of administration and special considerations for medication administration in infants and children.
31. Discuss appropriate transport guidelines for infants and children.
32. Discuss appropriate receiving facilities for low and high risk infants and children.
33. Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for respiratory distress/ failure in infants and children.
34. Discuss the pathophysiology of respiratory distress/ failure in infants and children.
35. Discuss the assessment findings associated with respiratory distress/ failure in infants and children.
36. Discuss the management/ treatment plan for respiratory distress/ failure in infants and children.
37. Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for hypoperfusion in infants and children.
38. Discuss the pathophysiology of hypoperfusion in infants and children.
39. Discuss the assessment findings associated with hypoperfusion in infants and children.
40. Discuss the management/ treatment plan for hypoperfusion in infants and children.
41. Discuss the assessment findings associated with cardiac dysrhythmias in infants and children.
42. Discuss the management/ treatment plan for cardiac dysrhythmias in infants and children.
43. Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for trauma in infants and children.
44. Discuss the pathophysiology of trauma in infants and children.
45. Discuss the assessment findings associated with trauma in infants and children.
46. Discuss the management/ treatment plan for trauma in infants and children.

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic will be able to:

1. Demonstrate the appropriate approach for treating infants and children.
2. Demonstrate appropriate intervention techniques with families of acutely ill or injured infants and children.
3. Demonstrate an appropriate assessment for different developmental age groups.
4. Demonstrate an appropriate technique for measuring pediatric vital signs.
5. Demonstrate the use of a length-based resuscitation device for determining equipment sizes, drug doses and other pertinent information for a pediatric patient.
6. Demonstrate the appropriate approach for treating infants and children with respiratory distress, failure, and arrest.
7. Demonstrate proper technique for administering blow-by oxygen to infants and children.
8. Demonstrate the proper utilization of a pediatric non-rebreather oxygen mask.
9. Demonstrate proper technique for suctioning of infants and children.
10. Demonstrate appropriate use of airway adjuncts with infants and children.
11. Demonstrate appropriate use of ventilation devices for infants and children.
12. Demonstrate endotracheal intubation procedures in infants and children.
13. Demonstrate appropriate treatment/ management of intubation complications for infants and children.
14. Demonstrate appropriate needle cricothyroidotomy in infants and children.
15. Demonstrate proper placement of a gastric tube in infants and children.
16. Demonstrate an appropriate technique for insertion of peripheral intravenous catheters for infants and children.
17. Demonstrate an appropriate technique for administration of intramuscular, inhalation, subcutaneous, rectal, endotracheal and oral medication for infants and children.
18. Demonstrate an appropriate technique for insertion of an intraosseous line for infants and children.
19. Demonstrate appropriate interventions for infants and children with a partially obstructed airway.
20. Demonstrate age appropriate basic airway clearing maneuvers for infants and children with a completely obstructed airway.
21. Demonstrate proper technique for direct laryngoscopy and foreign body retrieval in infants and children with a completely obstructed airway.
22. Demonstrate appropriate airway and breathing control maneuvers for infant and child trauma patients.
23. Demonstrate appropriate treatment of infants and children requiring advanced airway and breathing control.
24. Demonstrate appropriate immobilization techniques for infant and child trauma patients.
25. Demonstrate treatment of infants and children with head injuries.
26. Demonstrate appropriate treatment of infants and children with chest injuries.
27. Demonstrate appropriate treatment of infants and children with abdominal injuries.
28. Demonstrate appropriate treatment of infants and children with extremity injuries.

29. Demonstrate appropriate treatment of infants and children with burns.
30. Demonstrate appropriate parent/ caregiver interviewing techniques for infant and child death situations.
31. Demonstrate proper infant CPR.
32. Demonstrate proper child CPR.
33. Demonstrate proper techniques for performing infant and child defibrillation and synchronized cardioversion.

Refresher Block VI

Operations and Updates

REFRESHER BLOCK VI: OPERATIONS AND UPDATES

OPERATIONS

PRACTICE ANALYSIS TASK ITEMS

1. Prepare the emergency vehicle and equipment before responding to a call
2. Drive the emergency vehicle in an emergency situation
3. Assess scene safety
4. Provide for safety of self, patient and fellow workers
5. Take infection control precautions (body substance isolation), Dispose of sharps (needles, auto-injector, etc...), Dispose of materials contaminated with body fluids
6. Use body mechanics when lifting and moving a patient

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic will be able to:

1. Discuss the importance of completing an ambulance equipment/ supply checklist
2. Given a scenario involving arrival at the scene of a motor vehicle collision, assess the safety of the scene and propose ways to make the scene safer.
3. List factors that contribute to safe vehicle operations.
4. Describe the considerations that should be given to:
    a. Using escorts
    b. Adverse environmental conditions
    c. Using lights and siren
    d. Proceeding through intersections
    e. Parking at an emergency scene
5. Discuss the concept of "due regard for the safety of all others" while operating an emergency vehicle.
6. Explain how EMS providers are often mistaken for the police.
7. Explain specific techniques for risk reduction when approaching the following types of routine EMS scenes:
    a. Highway encounters
    b. Violent street incidents
    c. Residences and "dark houses"
8. Describe warning signs of potentially violent situations.
9. Explain emergency evasive techniques for potentially violent situations, including:
    a. Threats of physical violence.
    b. Firearms encounters
    c. Edged weapon encounters
10. Explain EMS considerations for the following types of violent or potentially violent situations:
    a. Gangs and gang violence

b. Hostage/ sniper situations
c. Clandestine drug labs
d. Domestic violence
e. Emotionally disturbed people
f. Hostage/ sniper situations

11 Explain the following techniques:
   a. Field "contact and cover" procedures during assessment and care
   b. Evasive tactics
   c. Concealment techniques
12 Describe police evidence considerations and techniques to assist in evidence preservation.
13 Describe the problems that a paramedic might encounter in a hostile situation and the techniques used to manage the situation.
14 Describe the equipment available for self-protection when confronted with a variety of adverse situations.
15 Differentiate proper from improper body mechanics for lifting and moving patients in emergency and non-emergency situations.

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic will be able to:

1. Assess personal practices relative to ambulance operations, which may affect the safety of the crew, the patient and bystanders.
2. Serve as a role model for others relative to the operation of ambulances.
3. Advocate and practice the use of personal safety precautions in all scene situations.
4. Discuss the importance of universal precautions and body substance isolation practices.
5. Describe the steps to take for personal protection from airborne and bloodborne pathogens.
6. Given a scenario, in which equipment and supplies have been exposed to body substances, plan for the proper cleaning, disinfection, and disposal of the items.
7. Explain what is meant by an exposure and describe principles for management.
8. Advocate and serve as a role model for other EMS providers relative to body substance isolation practices.

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic will be able to:

1. Demonstrate the following techniques:
   a. Field "contact and cover" procedures during assessment and care
   b. Evasive tactics
   c. Concealment techniques

2. Demonstrate the proper procedures to take for personal protection from disease.
3. Demonstrate safe methods for lifting and moving patients in emergency and non-emergency situations.
4. Demonstrate how to place a patient in, and remove a patient from, an ambulance.

OTHER SUGGESTED TOPIC AREAS

Current EMS Trends
Diagnostic ECG
EMS Agenda for the Future issues (such as prevention)
Geriatrics
Local clinical & technology / equipment update
Local quality improvement issues
Nationally recognized guidelines/programs for out-of-hospital care (ACLS, AMLS, BTLS, PALS, PEPP, PHTLS, etc)
Skills updates / maintenance

Scenario Template

SCENARIO TEMPLATE

Lectures have traditionally been the backbone for most educational endeavors. While this type of education process has been used in the past, today's students are seeking greater challenges in the classroom. One alternative method for education is the use of scenario based education. Scenario based education allows the instructor and student to achieve a more realistic approach to patient care situations. This refresher curriculum can be delivered to the experienced provider through the use of scenarios.

This scenario template has been included for use during the refresher course. The template was designed by the NREMT for use with their oral scenario station. The recommendation would be for the instructor to develop scenarios that met the objectives of this curriculum for use in the classroom portion as well as the skill labs.

PRACTICE SCENARIO

BACKGROUND & DISPATCH INFORMATION

You are a paramedic on a transporting paramedic unit. You are working with a paramedic partner in a suburban EMS system. You are thirty (30) minutes away from the attending physician's office and fifteen (15) minutes from the community hospital.

At 1512 hours, you are dispatched to a residence for a non-emergent transport of a woman to her doctor's office. It is a clear spring day with temperature of 68^{o} F. A woman who identifies herself as the patient's daughter meets you at the door.

BACKGROUND INFORMATION	
EMS System description (including urban/rural setting)	Suburban EMS that responds to both emergency and non-emergency calls
Vehicle type/response capabilities	2 person paramedic level transporting service
Proximity to and level/type of facilities	30 minutes to the attending physician's office 15 minutes to the community hospital
DISPATCH INFORMATION	
Nature of the call	Woman can't walk, requests transport to her physician's office, non-emergent
Location	Well kept walk-up single family dwelling
Dispatch time	1512 hours

Weather	68° F, clear spring day
Personnel on scene	Daughter who is serving as primary care giver
SCENE SURVEY INFORMATION	
Scene considerations	10 cement steps up to the front door No access for stretcher from any other doorway
Patient location	1st floor, back bedroom, narrow hallways & doorways
Visual appearance	Patient sitting in bed with multiple pillows holding her in an upright position, pale in color, does not respond to your presents in the room
Age, gender, weight	58 year old female, 200 pounds
Immediate surroundings (bystanders, family members present, etc.)	Clean, neat, well-kept surroundings Daughter is only family member present
PATIENT ASSESSMENT	
Chief complaint	Altered level of consciousness
History of present illness/injury	Daughter states "My Mother just passed out a couple of minutes ago from the pain." Patient woke this morning with a painful left leg that has increased in pain, unable to walk without sever pain. Daughter states that her mother, "Has a small score on her left inner thigh that has gotten bigger over the past few hours and her doctor wants to see her in his office."
Patient responses, symptoms, and pertinent negatives	Patient opens her eyes to loud verbal stimulus but does not verbally respond
PAST MEDICAL HISTORY	
Past medical history	Adult onset of diabetes controlled with diet and oral medication, hypertension, hernia repair several years ago
Medications and allergies	Glucophage bid, Lasix 20 mg qid, dilitazem qid, and Colace qid NKA
Social/family concerns	Patient lives alone after death of husband two years ago, daughter comes to her home each day to help mother with daily chores
EXAMINATION FINDINGS	
Initial vital signs	B/P 100/pa;pation

	P 130, rapid and weak R 8
Respiratory	Lung sounds are diminished bilaterally
Cardiovascular	Tachycardia, hypotensive
Gastrointestinal	-----
Genitourinary	-----
Musculoskeletal	-----
Neurologic	Opens her eyes to loud verbal stimulus and withdraws to pain Utters incomprehensible sounds Pupils equal and responds sluggishly to light
Integumentary	Large ecchymotic area over the patient's entire left inner thigh extending into the groin, pelvis, and left lower abdomen Area is hot to touch with crepitation under the skin Skin is pale, hot, and moist to the touch
Hematologic	----
Immunologic	----
Endocrine	Blood glucose 370 mg/dL
Psychiatric	----
PATIENT MANAGEMENT	
Initial stabilization	Assisted ventilations with high flow oxygen
Treatments	Assisted ventilations with high flow oxygen, IV enroute
Monitoring	ECG – sinus tachycardia, SpO_2 – 85%
Additional resources	Consider transportation to facility with immediate surgical capabilities and hyperbarics
Patient response to interventions	No change
TRANSPORT DECISION	
Lifting and moving the patient	Place in Reeves stretcher to ambulance stretcher

Mode	Rapid
Facilities	Emergency department
CONCLUSION	
Field impression	Septic shock
Rationale for field impression	Rapidly extending extremity infection, febrile, hypotension, and tachycardia with altered LOC
Related pathophysiology	"What is the basis for septic shock in this case?" Sever bacterial infection
Verbal report	"Please provide me with a verbal report on this patient." Must include chief complaint, interventions, current patient condition, and ETA
MANDATORY ACTIONS	
Rapid identification of life-threat and immediate transportation to the emergency department High flow oxygen	
POTENTIALLY HARMFUL/DANGEROUS ACTIONS ORDERED/PERFORMED	
Delayed transportation for on scene interventions Taking the patient to the doctor’s office	